PROJECT NO: 656-16-280 Upgrade Cable TV Infrastructure, Campus Wide

SCOPE OF WORK FOR A/E CONTRACTOR

A. GENERAL DESCRIPTION: Upgrade Cable TV Infrastructure, Campus Wide

The AE will analyze and design a set of documents for the completion of an upgraded CATV system for the St Cloud VA campus. Specific goals of this project are to improve CLC CATV quality, adding TV to all rooms that do not currently have one, and planning for future CLC expansion. System upgrade documents need to show all demolition work to remove existing system and all work and equipment for a new campus wide system.

Phasing shall also be designed into the project; including staff occupied space and utility outages. The design shall address all impact items created by the project and show remediation.

The scope of work shall consider design bid deduct alternates to assure that budget requirements are met.

B. PROCEDURE:

It is the intent of this contract that the A/E firm will provide all architectural, engineering and technical services from schematic design through construction period services. The A/E shall conduct the design following the A/E Submission Instructions for Minor and NRM Construction Program provided as Attachment A. The A/E along with the contracting officer and the VA Medical Center will negotiate a price for this work based on this scope of work, the submission requirements in Attachment A and any other items discussed and made part of the memorandum of negotiation using A/E Fee Proposal Form and instructions provided as Attachment C. Note: Attachments can be found on the Office of Construction & Facilities Management web site at http://www.cfm.va.gov/TIL/.

The design must begin with meetings with key VA Health Care System (VAHCS), St. Cloud staff and a thorough physical site survey. As a rule, VA would like to see a minimum of three (3) schematic design approaches prepared and presented to the VA. Once a schematic design approach has been selected, the design development stage begins. All large scale decisions, i.e., layouts, materials and systems selections, etc., shall be made by the completion of design development.

Design shall be complete enough to do a detailed estimate and predict the final bid price with 90% certainty. Estimates shall follow the Manual for Preparation of Costs Estimates for VA Facilities as edited for this project provided as Attachment B. Most importantly the detailed estimates shall not be lump sum and shall be detailed as the drawings.

That is if it is shown in detail it should be priced in detail. All trades (general, mechanical, electrical, etc.), will work from the final set of plans; therefore, plans must be complete and comprehensive in all aspects of construction. Once the design development plans have been approved, the construction documents stage of the project may begin. Details shall be put to the documents and final estimates prepared.

A/E firm shall include St. Cloud VA Health Care System's preferences for the materials to be used in the design referenced in Attachment D.

The A/E firm shall include in the specifications the Green Procurement requirements per Attachment E.

C. GENERAL REQUIREMENTS:

- 1. The A/E will be required to design using the VA Master Construction Specifications, Space Criteria, and all applicable Design Guides and Standards. These materials can be found at http://www.cfm.va.gov/TIL/
- 2. Drawings are to be completed in AutoCad. This facility employs AutoCad, Release 2015. The final drawings are also to be provided to the VA in digital format.
- 3 The A/E shall obtain the services of a Certified Industrial Hygienist to review the project and the VA asbestos assessment to assure that issues involving asbestos and lead paint are addressed. If abatement be required as a part of this project, plans and specifications will be provided for this work within the plan set.
- 4. The A/E shall obtain the services of a Professional Fire Protection Engineer to review, approve, and affix their stamp of Certification to the project documents being in compliance with NFPA Life Safety Code.
- 5. The VA has an internal Infection Control Risk Assessment policy for assuring the hazards associated with construction dust, noise, utility outages, etc., are addressed. The A/E shall become familiar with this policy and assure the contract documents implement appropriate safety measures when required.
- 6. VA also has recently implemented a policy that requires contractors to show evidence of appropriate OSHA training commensurate to the hazards of the tasks required of the project. The A/E shall coordinate with the VA to assure the contract documents clearly state these requirements.
- 7. The A/E shall provide design consideration for construction phasing. The occupied spaces, offices, patient rooms, and clinics must remain in service at all times.
- 8. The A/E shall follow current National Fire Protection Association (NFPA) codes and standards.

- 9 The A/E shall conduct a thorough assessment of the space(s) and meet with key VA Medical Center staff to determine the location(s) for essential systems and equipment.
- 10. The A/E shall comply with local, state and federal storm water management regulations impacting this VA project.
- 11. The A/E firm shall obtain, or specify in contract documents, all required approvals, permits, notifications and inspections as required by applicable laws, rules and/or regulations. This shall include complying with and supplying supporting documents for presentation to the Minnesota State Historic Preservation Office (SHPO). A/E must obtain favorable review from SHPO on DD prior to proceeding to CD. A/E to provide SHPO submittal drawings and memorandums at 30, 60, and 95 percent design completion and receive 'no adverse affects' determination prior to advancing to the next phase. SHPO submittals should be submitted as soon as possible, and prior to the applicable review. The A/E firm shall comply with archeological requirements of the Minnesota Historical Society.
- 12. The A/E firm shall comply with all National Environmental Policy Act (NEPA) requirements. Integrating environmental values and regulatory compliance into the decision making process is obligatory. The A/E firm shall, at the approved Schematic Design stage, prepare a NEPA evaluation. If the project is found to be not categorically excluded, the A/E firm shall be required to prepare an Environment Assessment (EA) or Environmental Impact Statement (EIS). NEPA Interim Guidance for Projects can be found at: http://www.cfm.va.gov/til/etc/NEPAGuidance.pdf.
- 13. The A/E firm shall provide two types of estimates derived from two independent estimating systems. One shall be from the A/E's own estimating systems and the other from the latest version of RS Means Cost Works.
- 14. n. The A/E shall create the initial estimate at the schematic design phase and maintain the updated estimate through the completion of the design. The project shall adhere to the budget requirements. At any time the A/E cost estimate is over the budget the A/E shall notify the Contracting Officer and the Contracting Officer's Representative immediately. It is the A/E's responsibility to find solutions to balance the SOW and costs to complete the design. The cost estimates shall account for the limited market for subcontractors in the area, and Service Disabled Veteran Owned Small Business (SDVOSB) requirements.
- 15. The A/E shall provide a Brand Name or Equal Products List to identify all items in the specifications designated as brand name specified or equal. The list shall identify each item with the specification section in which the salient characteristics of each item are defined.
- 16. The A/E shall provide a list of all items specified for which no substitutions will be accepted. The list shall identify each item with the specification section in which the item is defined.

- 4. Scope of Work for A/E Contractor Project 656-16-280 SCIP
- 17. The A/E shall include a preliminary timeline with their fee proposal which shall establish the following milestone dates for the project: 1. Preliminary plan review date, 2. Final plan review date, 3. Bid document completion date, and 4. Bid advertisement date.
- 18. The A/E shall provide a preliminary construction schedule which shall include a timeline for projected outages highlighting the facility interruption time frame for each affected area. This information shall be communicated to all bidders for their review and inclusion within their bids. It shall be communicated within the bid documents that the contractor will be required to review and provide any concerns regarding the projected construction timeline in order to minimize any disruptions to the medical center.
- 19. The A/E shall provide and alter documents as required by the VISN, legal and contracting review at no additional costs as per minor or NRM guidelines.
- 20. The design shall address all impact items created by the project and show remediation.
- 21. Architect shall coordinate with all new construction designs.
- 22. A/E shall provide a submittal to the COR no later than DD2 that identifies an overview of all products to be installed in this construction design. It is the A/E's responsibility to ensure products adhere to the St Cloud VAMC preference list and existing typical installations.

D. INITIAL DESIGN COMMENTS:

1. Architecture

- a. Design shall include all demolition and new work necessary to meet requirement of the project.
- b. The designer shall include hours for consulting with Equipment vendor(s) as necessary to complete the design.
- c. Design shall detail the architectural construction requirements including complete floor and ceiling plans, elevations, sections, details, schedules, material and color selection, and discipline coordination.
- d. Architect shall coordinate all interior design with Saint Cloud VA Health Care System Interior Designer, Brian Sjaaheim 320-252-1670 x 7353. Provide interior design schedule on drawings.
- e. Design shall include all finishes for doors, frames, walls, windows, ceiling, floor, cabinetry, countertops, etc. that are affected by the construction to ensure existing surrounding area transition cleanly into the new space. The Architect shall recommend finishes that are affordable, maintenance friendly, and aesthetically-pleasing.
- f. Design shall include all furnishings, medical equipment and storage cabinetry. Architect shall label items based on the following system; VV=VA purchased and

installed, VC=VA purchased-contractor installed, CC=Contractor purchased and installed, CV=contractor purchased-VA installed.

g. Design shall include all infection control procedures necessary to complete project in accordance with Joint Commission, Saint Cloud VA Health Care System, and Life Safety requirements.

2. Structural

- a. Design shall include any necessary structural construction requirements including all structural plans, elevations, sections, and details as required.
- b. Engineer shall include hours for consulting with Equipment vendor(s) as necessary to complete the design.
- c. Structural engineer shall evaluate the structural capacity for any equipment that may be roof mounted such as a dx unit.

3. Mechanical

- a. Mechanical Engineer shall field verify existing conditions to ensure that the HVAC infrastructure shall be sufficient to support the new equipment and layout. This is to include, but not be limited to fans, motors, duct mains, run-outs, new DDC controls for VAV boxes, thermostats, etc.
- b. Design shall include all mechanical plans, elevations, sections, details, and schedules for heating, ventilating, air conditioning, controls, refrigeration, plumbing, medical gases, and fire protection.
- c. Design shall include sinks, bathrooms, piping, connections to existing facility piping, valves, drains, etc.
- d. Design shall include all HVAC requirements, including ductwork, VAV boxes, reheats, exhaust, dampers, registers, etc.
- e. Design shall include required fire safety systems, controls, and addition/relocation of sprinkler system components. Designer shall coordinate sprinkler head locations with equipment rails and ceiling lift locations.
- f. Engineer shall include hours for consulting with Equipment vendor(s) as necessary to complete the design.
- g. All aspects of ventilation will be considered including but not limited to humidity levels, fresh air replacement, drafts and temperature of each space independently.
- h. Design shall include all other mechanical upgrades necessary to accommodate new equipment.

6.
Scope of Work for A/E Contractor
Project 656-16-280 SCIP

4. Electrical

- a. Evaluate power supply to the space. If additional circuits are required, this shall be included in the design.
- b. Design shall include all electrical plans, elevations, sections, details, diagrams, and schedules showing electrical closet, power distribution systems, auxiliary power systems, lighting fixtures, and outlets.
- c. Designer shall show all necessary service panels, circuits, cabling, wiring, conduit, outlets, relays, switches, etc. for a complete and usable electrical system.
- d. All existing electrical systems and components shall be field-verified by the electrical engineer.
- e. Design shall include requirements for both normal and critical power. Engineer shall include hours for consulting with Equipment vendor(s) as necessary to complete the design.
- 5. Low Voltage and Health Care Systems
 - a. Design shall include all plans, elevations, sections, details, diagrams, and schedules showing data closet, distribution, and signaling systems.
 - b. Design shall include additional low voltage outlets as needed for new control stations and relocated computer workstations.
 - c. Designer should include and coordinate all biomedical systems, security, fire alarm, patient monitoring, NC, panic/duress, telecommunications and data as required to meet the design.
 - d. Designer shall work with Biomedical Instrumentation Service (BIS) team to layout biomedical equipment requirements. All supporting infrastructure for biomedical equipment shall be shown on the drawings.
 - e. Design shall include installation of nurse call (NC) and code blue systems.
 - f. Design shall include overhead paging and panic alarms.
 - g. Designer shall evaluate the fire alarm system and design for additional system components that interface with the existing fire alarm system.
 - h. Engineer shall include hours for consulting with Equipment vendor(s) as necessary to complete the design.

6. General:

a. Sensitivity of Information: The sensitivity of information relating to this project is emphasized. All of the information in this SOW shall be treated as For Official Use

7. Scope of Work for A/E Contractor Project 656-16-280 SCIP

Only. This information is not to be distributed without a confirmed need to know as confirmed by the VA.

- b. Accuracy of Planning Information: The A/E shall conduct a thorough site visit to investigate all aspects of the existing space; Investigation shall include data closets, electric room and capacity, and all other utilities serving the new space. A/E shall document as-built conditions. The A/E's investigation shall include validation of all field conditions.
- c. Discrepancies in Planning Information: The A/E shall promptly report to the Contracting Officer in writing any discrepancies between this contract and the planning information provided by the Government. The A/E shall make no adjustments to his work due to the discrepancy before the Contracting Officer has reviewed the matter and forwarded his determination to the A/E. The A/E's failure to report any such discovered discrepancy or to wait for the Contracting Officer's determination shall be at his risk and expense.
- d. Change Orders: Any work that is not addressed by the contract and is considered a change order shall be immediately brought to the attention of the Contracting Officer. No "out-of-scope" or additional work shall be executed by the A/E prior to negotiation with the Saint Cloud VA Medical Center and approval by the Contracting Officer.
- e. Ownership of Drawings: All designs, drawings, specifications, notes, and other work developed in the performance of this contract shall be and remains the sole property of the Government and may be used on any other work without additional compensation to the A/E. With respect thereto, the A/E agrees not to assert any rights and not to establish any claim under the design patent or copyright laws.

E. SCHEMATIC DESIGN:

- 1. The A/E shall conduct such interviews and planning of meetings necessary to develop the design concept. The concept shall be accompanied with a gross magnitude cost estimate and a design narrative. The A/E shall present the schematic concept at a meeting with key VAHCS staff for each discipline (architectural, mechanical, electrical, etc.) that is anticipated to participate in the construction process. This submission shall be accompanied by order of magnitude estimates for each option being presented. Key VAHCS staff will review, analyze, and approve the concept that is to be developed into preliminary plans.
- 2. The A/E team shall make a formal presentation of the Schematic Design plans to Medical Center staff as required by the A/E submission requirements. Provide three (3) copies of all documents to the VA one week ahead of the presentation.

F. DESIGN DEVELOPMENT:

- 1. Upon VA's selection of the preferred design approach, the A/E firm shall proceed with design development. The A/E shall use the A/E Submission Instructions PG-08-15 as a guide in design development. The A/E shall conduct further meetings with key VAHCS staff to ascertain projects objective and investigate existing conditions of the physical plant to develop the selected design concept. During this phase of the project, it is important that the project be developed to sufficient detail that the cost estimate accurately reflects the cost of construction. It is at this time that the funding ceiling for the project will be established. A/E shall provide a detailed estimate at this time.
- 2. The A/E team shall make a formal presentation of the Design Development plans and specifications to Medical Center staff as required by the A/E submission requirements. Provide three (3) copies of all documents to the VA 10 calendar days ahead of the presentation.

G. CONSTRUCTION DOCUMENTS:

- a. If it is determined, based on the design development estimate that adequate funds are available for construction, the A/E may proceed with construction documents. The A/E shall follow the A/E Submission Instructions for construction documents.
- b. The A/E team shall make a formal presentation of the Construction Documents to Medical Center staff. Provide four (3) copies of the 100% review documents to the VA a minimum of 10 business days ahead of the presentation. An estimate of cost must be provided with the reviews to assure that project meets budget requirements.
- c. After the 100% Construction Documents are approved, the A/E firm shall deliver an additional four (4) sets of final drawings in hard copy as well as electronic drawing files in editable AutoCAD and PDF. A/E shall also deliver two (2) sets of final technical specification which shall be assembled in the proper order and bound as well as electronic specification files. The A/E shall provide a final detailed estimate with this submission.
- d. Immediately after the VA has posted the contract solicitation to the Federal Business Opportunities website (https://www.fbo.gov/), the A/E shall download, print, assemble in the proper order and deliver to the VA two (3) sets of the Solicitation, Offer and Award (Standard Form 1442) and the technical specifications. Two (2) of these sets shall be bound, and one (1) set shall be assembled in a three (3) ring binder. VA will assist by notifying the A/E when the solicitation has been posted.
- e. The A/E firm shall obtain, or specify in contract documents, all required approvals, permits, notifications and inspections as required by applicable laws, rules and/or regulations. This shall include complying with the Minnesota State Historic Preservation Office, if required.

H. CONSTRUCTION PERIOD SERVICES (List as a Deduct Alternate):

- 1. Upon receipt of authority and funds to advertise for bids and award of contract, the A/E firm shall provide the following services
 - a. Answer all questions which arise during the bidding period. Develop technical addenda if necessary, including specifications and drawings.
 - b. Generate a submittal schedule and register with all expected submittals and supply to the COR prior to the contractor submittal process.
 - c. Review all technical submissions, shop drawings, and other items required of the contractor. A/E is to make written recommendations to the VA as to their compliance with drawings and specifications. Return submittals with recommendations to the VA within 15 business days.
 - d. Reply to all Requests For Information (RFI) within 10 business days. If the RFI will generate a change order, supply the COR with Independent Government Estimate (IGE) with unit cost detail when the RFI is returned for review, no lump sum estimates.
 - e. Review all requests for change orders generated by the contractor, VAHCS and/or A/E firm and make written recommendations and provide detailed cost estimates to the VA. Most importantly the detailed estimates shall not be lump sum and shall be detailed as the drawings. That is, if it is shown in detail, it should be priced in detail. All reviews of change orders shall be completed (including recommendation, IGE and other supporting documents) within 10 business days of COR's/ CO's request.
 - f. Any Architectural Supplemental Instructions (ASI)/ Pricing Request (PR) or other documents that alter the SOW (other than RFI) shall be submitted to the COR within 20 business days from the date of the determined need.
 - g. Provide on-site inspections at pre-scheduled times and other critical times to assure compliance with contract requirements.
 - h. Perform final or partial final inspection and provide written report of errors and omissions from the inspection (punch list) to COR within 3 working days of the inspection.
 - i. Provide as-built drawings, one original vellum or Mylar, one reproducible set, and updated AutoCAD compact disks of the drawings, upon completion of work by the contractor.

- j. A/E's shall call at least one progress meeting per month with the COR and contractor. Meetings should be scheduled for approximately one hour depending on agenda.
- k. A/E's shall be rated on their performance and adherence to the design contract as well as the number of change orders that are determined to be design errors or design omissions. Design errors are defined as a contract document that calls for items which are incorrect (wrong dimensions; incorrectly sized pipe, duct, and equipment; conflicts and interferences; etc.). Design omissions are defined as a contract document that fails to include items necessary to the project, of which the architect-engineer (AE) should have been aware (utilities to equipment, missing architectural details, etc.).
- I. A/E shall inspect the construction work onsite for the below standard inspections, per each phase if applicable. Punch lists or correction notices shall be submitted by the A/E to the COR within 3 business days after the inspection date.
- (1) Pre-bid solicitation
- (2) Preconstruction meeting
- (3) In wall inspection (includes all work excluding insulation within walls).
- (4) Above Ceiling Inspection,
- (5) Final Inspection.

I. GOVERNMENT PROVIDED MATERIAL:

- 1. The VAMC Project Manager shall provide the A/E with all available as-builts and utility locations (including spare capacity). The A/E shall visit the project site to field-verify the information shown on the as-builts. The VAMC does not guarantee the accuracy or completeness of the as-builts. The A/E shall promptly report any discrepancies to the VAMC Project Manager for clarification.
- 2. The VAMC Project Manager will provide specification section 010000, General Conditions to the A/E along with the Section 01 35 26, Safety Requirements. The A/E shall modify the specification sections to meet project requirements.
- 3. Saint Cloud VA Medical Center Design Standards
- 4. VA Design Guides
- 5. VA Request for Proposal (RFP) Template
- 6. Submittal Log Template

Attachment A: A/E Submission Instructions for Minor and NRM Construction Program.

Attachment B: Manual for Preparation of Cost Estimates for VA Facilities.

Attachment C: A/E Fee Proposal Form

11.

Scope of Work for A/E Contractor Project 656-16-280 SCIP

Attachment D: St. Cloud Material Preferences

Attachment E: Green Procurement (electronic copy only)

J. REFERENCES:

- a. The A/E shall incorporate, but not be limited to references for design, available at http://www.cfm.va.gov/til/spec.asp or from the project engineer, as applicable: Construction Criteria Base or Whole Building Design Guide.
- b. Design and Construction Procedure:
- c. Saint Cloud VA Medical Center Design Standards
- d. VA Design Guides/Design Manuals
- e. VA Master Specifications
- f. VHA National CAD Standards and Details
- g. International Building Codes, State and Federal Regulations, ASHRAE Standards
- h. NFPA and Life Safety Code
- i. VA Space Criteria

K. PROPOSED SCHEDULE

All design meetings are scheduled at VAHCS, 4801 Veterans Drive, Ct. Cloud, MN 55603, on Friday afternoons from 12:45 p.m. to 4:30 p.m. The following schedule is subject to available Fridays.

- 1. Maximum proposed schedule unless alternate timeline approved (D+210 Calendar days)
- 2. Task Order Awarded D-Day
- 3. Design Initiated D+5
- 4. Kickoff Meeting D+15
- 5. SD1 Submission D+45
- 6. SD1 Review Completed by VAMC, Design Presentation— D+59
- 7. SD2 Submission D+80
- 8. SD2 Review Completed by VAMC, Design Presentation D+94
- 9. SD1 Submission –D+115
- 10. DD1 Review Completed by VAMC, Design Presentation D+129
- 11. DD2 Submission D+150
- 12. DD2 Review Completed by VAMC, Design Presentation D+174
- 13. CD Submission D+180
- 14. CD Review Completed by VAMC, Comments to be sent to A/E D+194

12. Scope of Work for A/E Contractor Project 656-16-280 SCIP

15. 100% CD Submission – D+210

L. QUALIFICATION OF DESIGNERS

A/E firm shall provide experienced Licensed Professional engineers to prepare the design. The engineers shall be licensed in the State of Minnesota, operate under reciprocity, or submit documentation that certifies the firm's compliance with all areas of MN statutes that govern MN-licensed architects and/or engineers.